

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/750,456

DATE: 10/18/2001
TIME: 09:18:58

Input Set : A:\lex286usa SEQLIST.TXT
Output Set: N:\CRF3\10182001\I750456.raw

4 <110> APPLICANT: Friedrich, Glenn
 5 Zambrowicz, Brian
 6 Sands, Arthur T.
 8 <120> TITLE OF INVENTION: Novel Mutated Mammalian Cells and Animals
 10 <130> FILE REFERENCE: LEX-0286-USA
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/750,456
C--> 12 <141> CURRENT FILING DATE: 2000-11-30
 12 <150> PRIOR APPLICATION NUMBER: US 09/728,445
 13 <151> PRIOR FILING DATE: 2000-11-30
 15 <150> PRIOR APPLICATION NUMBER: US 60/168,358
 16 <151> PRIOR FILING DATE: 1999-12-01
 18 <160> NUMBER OF SEQ ID NOS: 891
 20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 449
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Mus musculus
 27 <220> FEATURE:
 28 <221> NAME/KEY: misc_feature
 29 <222> LOCATION: (1)...(449)
 30 <223> OTHER INFORMATION: n = A,T,C or G
 32 <400> SEQUENCE: 1
W--> 33 aggccttcaa gagatccgca aatgtggant gaaaaacttc cgnaacatcc aggntgatga 60
 34 ggcttaattttt ttgacttggc aagggtttat tttcttgac aaccctccat atgataagg 120
 35 agccttcaga attgaaatca actttccagc agatgtatcca ttcaaaaccac ccaagatcac 180
 36 atttaaaaaca aagatctacc accctaatacat cgatgagaag gggcaggctt gtctgccagt 240
 37 cattagtgtt gaaaaacttggaa agccagccac caagactgac caagtaatcc agtccctcat 300
 38 aqcaactggtg aatgaccccc acccttgagca cccactccgg gctgacctag ctgaagaata 360
 39 ctcttaaggac ctgtaaaaat ttgttaagaa tgctgaagag ttacaaaga aatatgggaa 420
 40 aaaagccgac ctggggcctt aaaatctgc 449
 42 <210> SEQ ID NO: 2
 43 <211> LENGTH: 397
 44 <212> TYPE: DNA
 45 <213> ORGANISM: Mus musculus
 47 <220> FEATURE:
 48 <221> NAME/KEY: misc_feature
 49 <222> LOCATION: (1)...(397)
 50 <223> OTHER INFORMATION: n = A,T,C or G
 52 <400> SEQUENCE: 2
W--> 53 atttgcgcgt tgaaggcatt tacattcgga gttccgcggc ctcttcanag gctgtaaaaa 60
W--> 54 tgccggagtc acnnaagcct gcaaaaagct gttgcttggc ttgctgtgc tgctgtact 120
 55 gccgtccctg cccgtgtgc aagctgtac tctgtgtct gctgtgtc ttgtgtctg 180
 56 attgttgcgg ttgctgggtt ctgtttactg tttgctgcgg gctggattgc tggattgtcg 240
W--> 57 attgccagtc gggnaaatcc tgnnnataaa aatccanctt gccccanaaa acangacnac 300
W--> 58 cctnnaggaa gtatttaat gatttcaatn cgcccttcc ccctctnacc tttctctt 360
 59 accttatgct gggggattgg aagggtggca aaaaaaaaaa 397
 61 <210> SEQ ID NO: 3

ENTERED

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62 <211> LENGTH: 285
 63 <212> TYPE: DNA
 64 <213> ORGANISM: Mus musculus
 66 <220> FEATURE:
 67 <221> NAME/KEY: misc_feature
 68 <222> LOCATION: (1)...(285)
 69 <223> OTHER INFORMATION: n = A,T,C or G
 71 <400> SEQUENCE: 3
 W--> 72 gatggagaaa ctgaggattcc gcatngaanc aggctgattc agacctcgct gccactgagt 60
 73 atgagaccac ctgggtgaa acttagatgg ctctattgtt ctgtcacctg ccgcactcc 120
 74 tctccaagac actgttacct gcccttgaga tattccggag acagcatccc gcagatcacc 180
 75 tacaggctgg cgacaggcac caagaatgga ttggggggg atgggcctcc cctttata 240
 76 cggcagatg ctttagtaat ttgggtcct tgaacagaaa aaaaa 285
 78 <210> SEQ ID NO: 4
 79 <211> LENGTH: 287
 80 <212> TYPE: DNA
 81 <213> ORGANISM: Mus musculus
 83 <220> FEATURE:
 84 <221> NAME/KEY: misc_feature
 85 <222> LOCATION: (1)...(287)
 86 <223> OTHER INFORMATION: n = A,T,C or G
 88 <400> SEQUENCE: 4
 W--> 89 caggagtaac aagtgtggag gtcnaaggan aactcttggaa atctcttcta tcctatcaca 60
 W--> 90 tcngtctca gcatcnaaca tggccaact cctcaactt ggtancctgg nacttnata 120
 W--> 91 nccatcttan tgctcaaaaa aggtttctcc tatgaagacc gtgtntcctg gctgtcctag 180
 W--> 92 aatttgctgt gcnnaccaac ctggcctnna actcataaac ntttacctgc ctctgcctct 240
 W--> 93 aaagtgttgg gattnaaagc atttcccact atgtaacaaa caaaaaa 287
 95 <210> SEQ ID NO: 5
 96 <211> LENGTH: 417
 97 <212> TYPE: DNA
 98 <213> ORGANISM: Mus musculus
 100 <220> FEATURE:
 101 <221> NAME/KEY: misc_feature
 102 <222> LOCATION: (1)...(417)
 103 <223> OTHER INFORMATION: n = A,T,C or G
 105 <400> SEQUENCE: 5
 W--> 106 cgccccatcct aaattcctag cttgctcggg gtaggagntt cctgttcatt cgttctgata 60
 W--> 107 nncccaactgn tgaaaaactga ggnccacac tcgtatcnct ntcnacngga cctaacatta 120
 W--> 108 ttcgggangg aactctggtc cncnccccca tcnttcaatn nnnntgtcgt ggnattgg 180
 W--> 109 ttngaaccnt gntcagnata aagctgaaaa aaacccatt gnctnnccatt tncaccanga 240
 W--> 110 ccqggaagng tntnatatcn aggatccgaa taaggtctt caaggcttct ttgaccgaga 300
 W--> 111 aggagaanag ttagaatatg aatttgatga gcnaggacac atcacttggc tctgcagggt 360
 W--> 112 gaggttacct gtagatgatt cnntggaa acagctggc gctgaggcca ttcactc 417
 114 <210> SEQ ID NO: 6
 115 <211> LENGTH: 173
 116 <212> TYPE: DNA
 117 <213> ORGANISM: Mus musculus
 119 <400> SEQUENCE: 6
 120 gtctagaatg tatgtgccat gctggaaaca ggcctggatc gtctgcaaga gcagccatcg 60

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121	gtcttagctg ctaactcctc ttcagtcata ttgtaaatac gattctgagg tgacgcttcc	120
122	ctgtcacccat ccttaacatg ctctcatcgat accctctggta caaataaaaaaaa aaa	173
124	<210> SEQ ID NO: 7	
125	<211> LENGTH: 167	
126	<212> TYPE: DNA	
127	<213> ORGANISM: Mus musculus	
129	<220> FEATURE:	
130	<221> NAME/KEY: misc_feature	
131	<222> LOCATION: (1)...(167)	
132	<223> OTHER INFORMATION: n = A,T,C or G	
134	<400> SEQUENCE: 7	
W-->	135 tcttagatgtatgtccatgc tggaaaccan gcctggatcg tctgcaagag cagnacatcg 60	
W-->	136 tcttagntgc taactcctct tcagtcata ttgaatacna ttctgagggt acgcttcctc 120	
W-->	137 gtcgnncaccc ttaacatgct ctcatcgta cctctgaaaa aaaaaaaaaa 167	
139	<210> SEQ ID NO: 8	
140	<211> LENGTH: 191	
141	<212> TYPE: DNA	
142	<213> ORGANISM: Mus musculus	
144	<220> FEATURE:	
145	<221> NAME/KEY: misc_feature	
146	<222> LOCATION: (1)...(191)	
147	<223> OTHER INFORMATION: n = A,T,C or G	
149	<400> SEQUENCE: 8	
W-->	150 attctccatc cacaattat gcagtcaagt ttcctcnaat ttggggtaa tacacacaga 60	
151	tgqcaatgta tgaacctcg tctggagaaa tcacctgcat aatcatggta ttcccctc 120	
W-->	152 caggatttat acanaagcag tttccaaat tctgaaacct gatgccatc acatactttg 180	
153	ggctgagaaa a 191	
155	<210> SEQ ID NO: 9	
156	<211> LENGTH: 157	
157	<212> TYPE: DNA	
158	<213> ORGANISM: Mus musculus	
160	<220> FEATURE:	
161	<221> NAME/KEY: misc_feature	
162	<222> LOCATION: (1)...(157)	
163	<223> OTHER INFORMATION: n = A,T,C or G	
165	<400> SEQUENCE: 9	
W-->	166 ggtcttagatt atgtcatgc tggaaacaag cctggatcg tctgcaagagc agncatcggt 60	
W-->	167 cttagctgtatgtccatgc tggaaacaag cctggatcg tctgcaagagc agncatcggt 120	
W-->	168 gtcgnncaccc ttaacatgct ctcatcgta cctctgaaaa 157	
170	<210> SEQ ID NO: 10	
171	<211> LENGTH: 273	
172	<212> TYPE: DNA	
173	<213> ORGANISM: Mus musculus	
175	<220> FEATURE:	
176	<221> NAME/KEY: misc_feature	
177	<222> LOCATION: (1)...(273)	
178	<223> OTHER INFORMATION: n = A,T,C or G	
180	<400> SEQUENCE: 10	
181	ggaatacataaa gggccagggt ccggctcgatc ttgagctgac atctaggttc 60	

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W--> 182 ctgggtggga ccacaaaatnc aactatactg gaggctgatg canttctt aggactccaa	120
183 gagatcagg actcaaaatc aagagaggag caaccagca agtaatggac tgcgcttgct	180
184 gtatttgaac ccatttttag cccagaaaaac tataaataaa taaataattt aataaaattt	240
W--> 185 tnataaatga aaagtaatcc tgtaaaaaaa aaa	273
187 <210> SEQ ID NO: 11	
188 <211> LENGTH: 370	
189 <212> TYPE: DNA	
190 <213> ORGANISM: Mus musculus	
192 <220> FEATURE:	
193 <221> NAME/KEY: misc_feature	
194 <222> LOCATION: (1)...(370)	
195 <223> OTHER INFORMATION: n = A,T,C or G	
197 <400> SEQUENCE: 11	
198 actqaggtga cctttgaaag ttaacagggg tgccatgggc ttagtaagat aaacggaact	60
199 gctgttcaac cccgcccagt ctggggatga gtcattgttt tcaaattttt gaacaaagca	120
200 cacaattaa gaataataca agcaagaac agcagagaga cacaaaagga catagaatcc	180
201 ctqatcctca ctgtgatctg gtaacactag ttctaggct ggagagagag atgctcaggg	240
202 caaqtgctct tacagagaac atgagttcaa ttcccagaac ccacatggta cctcacaact	300
W--> 203 gccttatttca tacatgtggg gcagaacacc gatacacata cttttttttt taanaattga	360
204 aaaaaaaaaaa	370
206 <210> SEQ ID NO: 12	
207 <211> LENGTH: 448	
208 <212> TYPE: DNA	
209 <213> ORGANISM: Mus musculus	
211 <220> FEATURE:	
212 <221> NAME/KEY: misc_feature	
213 <222> LOCATION: (1)...(448)	
214 <223> OTHER INFORMATION: n = A,T,C or G	
216 <400> SEQUENCE: 12	
W--> 217 ctcccttagt gagaacngccc taggcagacc acntacnntt acccttctga aatctcggt	60
W--> 218 ctggaggatc tnggcnngga tcctgatacc cccattgccc ccttagcnac ccatcctgac	120
W--> 219 naggaggagg aggaggagga ggaagaggag gagttgcttc tgcngcctgg gctccaggc	180
W--> 220 gggctgcgca ccaaggccct antcgtggat gantcctgcc ggcggtgacc atctccant	240
221 ttqggcgcac acctccttcc ttccttcctt cccgtacctg aagcttctgg agtctggatg	300
W--> 222 attcanagcc gacanacctg gcngggatcc tgcctggcag ggaaggggggt tgancnttt	360
W--> 223 ctgacttgtt ttcccatcc catttctgg gcnnancnt tattctaaat ttaccctaa	420
224 ctcatgggtt ttccctgggg tgacctaa	448
226 <210> SEQ ID NO: 13	
227 <211> LENGTH: 394	
228 <212> TYPE: DNA	
229 <213> ORGANISM: Mus musculus	
231 <220> FEATURE:	
232 <221> NAME/KEY: misc_feature	
233 <222> LOCATION: (1)...(394)	
234 <223> OTHER INFORMATION: n = A,T,C or G	
236 <400> SEQUENCE: 13	
W--> 237 ccctgatact gcttgnttgg ggttagagctn cctgctcnata cttctgcen nacnnnatgc	60
W--> 238 tggAACCTGA gnatcnacat aattgcaccc tctttctgg accagacatt attccggcggg	120
W--> 239 aatcgggtcc ccacccctg acgtcatacc tggtgtctca ncnnngnat ttgaactgtg	180

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W--> 240 atcatctgag ccaaaatann ccaaagtata naagtcaaca aaggcaanat gctgnanatn	240
W--> 241 aaatggaaaa ccantcattt anaacatcat cnccctctnn ctccgaggac ncttcgggtgc	300
W--> 242 ggatctggga tatcccnnaa ggtgggctga aacggaacnt naccgaggga ctccctggagc	360
W--> 243 tcnatggana catgcgccat gtggggctgg tggta	394
245 <210> SEQ ID NO: 14	
246 <211> LENGTH: 461	
247 <212> TYPE: DNA	
248 <213> ORGANISM: Mus musculus	
250 <220> FEATURE:	
251 <221> NAME/KEY: misc_feature	
252 <222> LOCATION: (1)...(461)	
253 <223> OTHER INFORMATION: n = A,T,C or G	
255 <400> SEQUENCE: 14	
W--> 256 cgcaccggat tgggcagcan taacnacact gcaanaggan cctnctgcac acgtttatttg	60
W--> 257 gganagtna attgnagagg tgannagacc ccgagccaa aactgggtgt gcttatata	120
W--> 258 gcctangaga ggantgtctc acacctggat tggttatgca ctacgcctca tttgcattgt	180
W--> 259 cctcatctga ttggctactc tctctctgtt cctcacaaag cctcattntc atacctcatt	240
W--> 260 tgcatgtctc acacctgatt gtttatantc tccaaacccc ctttacccctg cccggggcnn	300
W--> 261 gcantgtctt tgcaaaaaac ttactgcat atgttcacat tggttgtttg tccaaactta	360
W--> 262 tgcgtgggtgg ccancagtan tcagtgccac tctgcaacgg cacntgtggc ttccccatc	420
263 tccccctttt tgtttaata aatgaggtt gggactaggc c	461
265 <210> SEQ ID NO: 15	
266 <211> LENGTH: 301	
267 <212> TYPE: DNA	
268 <213> ORGANISM: Mus musculus	
270 <400> SEQUENCE: 15	
271 aagtgttccc taagaagggtt gtcaccctga cgaaagaacg gaaagccaa cagctccagc	60
272 gcctccttggaa catgaagagc aacccatatac agggcttgc tgccactgg gattatgaaa	120
273 aqaaggagtg gaaaaagtga ccaacgtccc acgtctggcg ccagccccctg caaactgctt	180
274 ctgcagccca ggagacaatac atccccctccc ctccccctccc ctccctcctc ctccctgagtc	240
275 ctgtctccac tcccttctcc aataaaagca gcctgcttttgc ttctgcttgc aaaaaaaaaaa	300
276 a	301
278 <210> SEQ ID NO: 16	
279 <211> LENGTH: 285	
280 <212> TYPE: DNA	
281 <213> ORGANISM: Mus musculus	
283 <220> FEATURE:	
284 <221> NAME/KEY: misc_feature	
285 <222> LOCATION: (1)...(285)	
286 <223> OTHER INFORMATION: n = A,T,C or G	
288 <400> SEQUENCE: 16	
W--> 289 aggttcctaa aatcanactc tgtcatcggn aagtgnagac tggacccttc	60
W--> 290 acatgccnat aagcantcaa aatatattnc tgggagctgg ananatgggc tcagcagtt	120
W--> 291 aaaacactga ctgctttcc ggangtcttg tggtaataatc ccagcaacca caggtaact	180
W--> 292 cacaaccatc tgtaatgana tctgatgccc tcttcgggtg tggtaaaaa cagctacagt	240
293 gtccttacat ataataata aataaatctt ttttttaaa gaata	285
295 <210> SEQ ID NO: 17	
296 <211> LENGTH: 100	
297 <212> TYPE: DNA	

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/750,456

DATE: 10/18/2001
TIME: 09:18:59

Input Set : A:\lex286usa SEQLIST.TXT
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L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:58 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:72 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
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L:239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14

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L:260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14

L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14

L:262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14

L:289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16